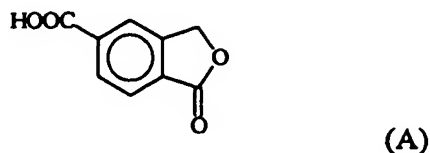


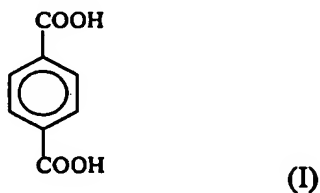
**Amendments to the Claims:**

1-21 (Canceled)

22. (Previously presented) A process for the preparation of 5-carboxyphthalide of formula A



which comprises reacting formaldehyde and terephthalic acid of formula I



in fuming sulfuric acid containing at least 25-30% by weight of SO<sub>3</sub>, heating the mixture at 120-145°C and isolating the 5-carboxyphthalide thus obtained.

23. (Original) A process according to claim 22, in which formaldehyde is used in form of its precursor 1,3,5-trioxane of formula II



24. (Original) A process according to claim 22, in which formaldehyde is used in form of its precursor paraformaldehyde.

25. (Original) A process according to claim 23, in which the 1,3,5-trioxane of formula II is used in an amount corresponding to 2.5-3.2 mol of formaldehyde/mol of the starting terephthalic acid.

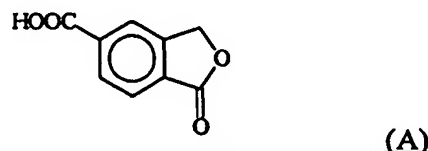
26. (Original) A process according to claim 25, in which said 1,3,5-trioxane is added at a temperature of 30-35°C.

27. (Cancelled)

28. (Previously presented) A process according to claim 22, in which the fuming sulfuric acid is used in an amount of 3-6 litres/Kg of terephthalic acid.

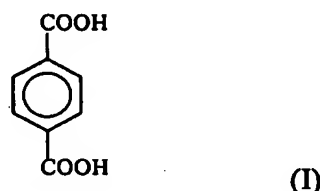
42. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim 22

of formula A



which comprises:

reacting formaldehyde and terephthalic acid of formula I



in fuming sulfuric acid containing at least 25-30% by weight of SO<sub>3</sub>;

heating the mixture at 120-145°C; and

isolating the 5-carboxyphthalide thus obtained.

43. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim 23 42, in which formaldehyde is used in form of its precursor 1,3,5-trioxane of formula II



44. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim 24 42, in which formaldehyde is used in form of its precursor paraformaldehyde.

45. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim 25 43, in which the 1,3,5-trioxane of formula II is used in an amount corresponding to 2.5-3.2 mol of formaldehyde/mol of the starting terephthalic acid.

46. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~26~~ 45, in which said 1,3,5-trioxane is added at a temperature of 30-35°C.
47. (Canceled)
48. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~28~~ 42, in which the fuming sulfuric acid is used in an amount of 3-6 litres/Kg of terephthalic acid.
49. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~29~~ 48, in which fuming sulfuric acid is used in an amount of about 3 litres/Kg of terephthalic acid.
50. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~30~~ 42, in which 5-carboxyphthalide is isolated by neutralization of the reaction mixture with a base.
51. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~31~~ 42, in which 5-carboxyphthalide is isolated by diluting the reaction mixture with glacial acetic acid, then adding water and neutralizing with a base.
52. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~32~~ 50 or 51, in which said base is an alkaline metal base.
53. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~33~~ 52, in which said alkaline metal base is sodium hydroxide, carbonate or bicarbonate.
54. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~34~~ 42, in which, at the end of the reaction, the 5-carboxyphthalide is isolated by the formation of a solution containing a salt thereof which is neutralized with an acid.
55. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~35~~ 54, in which said salt is the sodium salt.

56. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~36~~ 54, in which the salt is formed by adding the base to a pH of about 8.

57. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~37~~ 54, in which said acid is hydrochloric acid.

58. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~38~~ 42, in which 5-carboxyphthalide is isolated by treatment of the reaction mixture with water.

59. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~39~~ 58, in which the addition of water is made at 0-5°C and the exothermia is controlled by keeping the temperature at about 20-25°C.

60. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~40~~ 42, in which the mixture is heated at 130-135°C.

61. (Currently amended) A process for the synthesis of citalopram, comprising the process for the synthesis of 5-carboxyphthalide according to claim ~~41~~ 42, in which formaldehyde is added to fuming sulfuric acid after the addition of terephthalic acid.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 42-46 and 48-61 recites the limitation "synthesis of cital<sup>o</sup>pram" in line one of each claim. There is insufficient antecedent basis for this limitation in the claim. Claim 22 from which the above claims depend is drawn only to the synthesis of 5-carboxphthalide.

Upon reconsideration the rejection under 35 USC 101 has been withdrawn in light of the amendment of 1/31/05 claiming subject matter not encompassed by the parent. Further, the claims as presently recited are neither taught nor suggested in the prior art.

Accordingly, claims 22-26 and 28-41 are allowed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Covington whose telephone number is (571) 272-0681. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, C. Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RKC

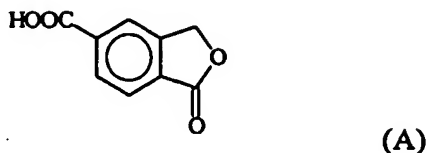
Raymond Covington  
Examiner  
Art Unit 1625

  
4/15/05

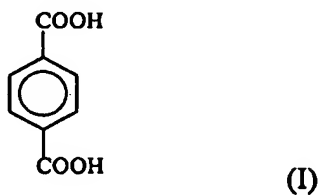
**Amendments to the Claims:**

1-21 (Canceled)

22. (Previously presented) A process for the preparation of 5-carboxyphthalide of formula A



which comprises reacting formaldehyde and terephthalic acid of formula I



in fuming sulfuric acid containing at least 25-30% by weight of SO<sub>3</sub>, heating the mixture at 120-145°C and isolating the 5-carboxyphthalide thus obtained.

23. (Original) A process according to claim 22, in which formaldehyde is used in form of its precursor 1,3,5-trioxane of formula II



24. (Original) A process according to claim 22, in which formaldehyde is used in form of its precursor paraformaldehyde.

25. (Original) A process according to claim 23, in which the 1,3,5-trioxane of formula II is used in an amount corresponding to 2.5-3.2 mol of formaldehyde/mol of the starting terephthalic acid.

26. (Original) A process according to claim 25, in which said 1,3,5-trioxane is added at a temperature of 30-35°C.

27. (Cancelled)

28. (Previously presented) A process according to claim 22, in which the fuming sulfuric acid is used in an amount of 3-6 litres/Kg of terephthalic acid.

10/796,336

29. (Original) A process according to claim 28, in which fuming sulfuric acid is used in an amount of about 3 litres/Kg of terephthalic acid.
30. (Original) A process according to claim 22, in which 5-carboxyphthalide is isolated by neutralization of the reaction mixture with a base.
31. (Original) A process according to claim 22, in which 5-carboxyphthalide is isolated by diluting the reaction mixture with glacial acetic acid, then adding water and neutralizing with a base.
32. (Original) A process according to claim 30 or 31, in which said base is an alkaline metal base.
33. (Original) A process according to claim 32, in which said alkaline metal base is sodium hydroxide, carbonate or bicarbonate.
34. (Original) A process according to claim 22, in which, at the end of the reaction, the 5-carboxyphthalide is isolated by the formation of a solution containing a salt thereof which is neutralized with an acid.
35. (Original) A process according to claim 34, in which said salt is the sodium salt.
36. (Original) A process according to claim 34, in which the salt is formed by adding the base to a pH of about 8.
37. (Original) A process according to claim 34, in which said acid is hydrochloric acid.
38. (Original) A process according to claim 22, in which 5-carboxyphthalide is isolated by treatment of the reaction mixture with water.
39. (Original) A process according to claim 38, in which the addition of water is made at 0-5°C and the exothermia is controlled by keeping the temperature at about 20-25°C.
40. (Original) A process according to claim 22, in which the mixture is heated at 130-135°C.
41. (Original) A process according to claim 22, in which formaldehyde is added to fuming sulfuric acid after the addition of terephthalic acid.